

SUMMARY OF BOARD ITEM

ITEM # 03-2-3: Public Meeting to consider revisions to the Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) Guidelines and to the Lower-Emission School Bus Program Guidelines.

STAFF RECOMMENDATION: Staff recommends that the Board approve the proposed revisions.

DISCUSSION: The Board initially approved Carl Moyer Program Guidelines in February 1999 and updated those in November 2000. The Carl Moyer Program provides funding for projects that reduce oxides of nitrogen (NOx). These reductions assist California in meeting State Implementation Plan commitments and in ensuring conformity with transportation plans, thus preventing the loss of federal highway dollars. Funds are overseen by ARB and administered by local air districts. In the first three years of the Carl Moyer Program (1998-2001), NOx reductions of approximately 11 tons per day were achieved at an average cost-effectiveness of \$4,000 per ton.

ARB also oversees the Lower-Emission School Bus Program, designed to reduce school children's exposure to toxic particulate matter (PM) and smog-forming NOx. The Board approved original guidelines for the School Bus Program in December 2000. The program began that year with a \$50 million allocation from the state budget. There was an additional budget allocation of \$16 million in 2002. In the first two years of the program, emission reductions were achieved by replacing older, high polluting buses with newer models, and by equipping in-use school buses with ARB-verified retrofit devices.

In 2002 state voters approved Proposition 40 – the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act – which contains an additional \$50 million for Carl Moyer projects. Assembly Bill 425 of 2002 (Chapter 379) further directs that 20 percent of these funds be allocated to the Lower-Emission School Bus Program.

The proposed revisions to the Carl Moyer Program Guidelines include tentative district funding allocations, new matching fund requirements that include the opportunity for smaller districts to obtain a one-year waiver for their match, updated cost-effectiveness criteria, and a new provision for satisfying match requirements with PM reduction projects. New environmental justice requirements per recent statutory changes were also incorporated. Finally, the proposal also includes an update of cost-effectiveness, engine emission standards and inventories, and several minor technical and administrative modifications.

The School Bus Guidelines are being revised to address new school bus purchase eligibility criteria, to eliminate match requirements for air districts that self-administer the program, and to add a mechanism for assessing monetary penalties on business entity(ies) responsible for delays that result in failure of program-funded bus delivery. Minor changes to requirements for school districts to contribute funds toward the purchase of new school buses are also included.

SUMMARY AND IMPACTS:

The proposed guideline revisions will ensure that the Carl Moyer and School Bus programs continue to deliver real, quantifiable, enforceable, and cost-effective emission reductions in concert with the new funding stream offered by Proposition 40 and new engine technologies recently introduced in California.

AIR RESOURCES BOARD**NOTICE OF PUBLIC MEETING TO CONSIDER REVISIONS TO THE CARL MOYER MEMORIAL AIR QUALITY STANDARDS ATTAINMENT PROGRAM GUIDELINES AND THE LOWER-EMISSION SCHOOL BUS PROGRAM GUIDELINES**

The California Air Resources Board (ARB or Board) will conduct a public meeting at the time and place noted below to consider revisions to the Carl Moyer Program (CMP) Guidelines and the Lower-Emission School Bus Program Guidelines. The guidelines govern the disposition of funds under two ARB grant programs.

DATE: March 27, 2003

TIME: 9:00 a.m.

PLACE: Air Resources Board
Central Valley Auditorium
1001 "I" Street
Sacramento, CA 95812

This item will be considered at a two-day meeting of the Board, which will commence at 9:00 a.m., March 27, 2003, and may continue at 8:30 a.m., March 28, 2003. This item may not be considered until March 28, 2003. Please consult the agenda for the meeting, which will be available at least ten days before March 27, 2003, to determine when this item will be considered.

If you have special accommodation or language needs, please contact ARB's Clerk of the Board at (916) 322-5594 or sdorais@arb.ca.gov as soon as possible. TTY/TDD/Speech to Speech users may dial 7-1-1 for the California Relay Service.

FUNDING FOR CARL MOYER AND SCHOOL BUS PROGRAMS – PROPOSITION 40

On March 5, 2002, the voters of California approved Proposition 40, the California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act. The measure allows the State to sell \$2.6 billion of general obligation bonds to conserve natural resources. Of these bonds, the measure allocates a total of \$50 million over two years to the ARB for distribution to local air pollution control and air quality management districts for projects that "affect air quality in state and local parks and recreation areas" in accordance with the Carl Moyer Program (Health and Safety Code [HSC] section 44275 et seq.) guidelines. In addition, Assembly Bill 425 (Stats. 2002, Ch. 379) directs that 20 percent of the Proposition 40 funds made available to ARB shall be allocated for the acquisition of "clean, safe, school buses for use in California's public schools." Assembly Bill 425 did not provide any funding for continuation of the in-use diesel bus retrofit component of the ongoing Lower-Emission School Bus Program. Considered together, these appropriations provide \$19.5 million for the CMP and \$4.92 million for the Lower-Emission School Bus Program in the 2002/2003 fiscal year.

The Carl Moyer and the School Bus Programs are ongoing grant programs that have been well received and significantly oversubscribed in the past – the CMP for the past four years and the Lower-Emission School Bus Program for the past two years. Both programs are

expected to be oversubscribed with the new funding. In both programs, the ARB provides oversight but does not administer the program directly. All CMP funds are provided to local air districts while the local air districts or the California Energy Commission (CEC) administers the school bus funds. Finally, both programs contain environmental justice criteria, i.e., criteria to ensure that at least 50 percent of the funds are allocated in areas disproportionately affected by air pollution.

THE CARL MOYER PROGRAM

The Carl Moyer Memorial Air Quality Standards Attainment Program (HSC section 44275 et seq.) is a grant program that funds the incremental cost of cleaner-than-required engines and equipment. Public or private entities that operate eligible engines and/or equipment in California can participate by applying for funds directly to their local air pollution control or air quality management districts (districts). Examples of eligible engines and equipment include heavy-duty on-road and off-road, marine, locomotive, stationary agricultural pumps, forklifts, airport ground support equipment, and heavy-duty auxiliary power units.

The Carl Moyer Program provides funds for significant near-term reductions in emissions of oxides of nitrogen (NO_x), a smog-forming pollutant. These reductions are necessary for California to meet its clean air commitments under the State Implementation Plan (SIP) and for air districts to meet commitments in their conformity plans and state air quality plans. The program also provides reductions of particulate matter (PM) emissions, which are a component of diesel engine exhaust and have been identified by the ARB as a toxic air contaminant.

The ARB holds responsibility for developing the guidelines that districts use to implement the program and allocates funding to the districts. In order to allocate and oversee initial funding, the ARB approved the first set of guidelines for the CMP in February 1999. In November 2000, the ARB generated and approved a revision designed to improve and optimize the program based on data obtained from the first year of operation. These guidelines are available at ARB's Public Information Office, 1001 I Street, Sacramento, CA, 95812 and at the ARB website: <http://www.arb.ca.gov/msprog/moyer/moyer.htm>.

During the first year of implementation, 1998/1999, demand for the \$25 million allocation far exceeded available funding, thus enabling the resulting emission reductions to become extremely cost-effective. As a result, the Governor and the Legislature responded to the program's initial success by approving one-time budget appropriations of \$23 million, \$50 million, and \$16 million over the next three years, respectively, in order to continue the program. Total program funding for the first four years reached approximately \$114 million.

In the second year of the CMP, legislation established a 13-member Advisory Board (HSC section 44297) with the responsibility for making recommendations on the need to continue the program, the amount and source of continued funding, and program modifications, if necessary. The Advisory Board recommendations included *i*) the continuation of the CMP with increases in funding through the year 2010; *ii*) a cap on local district matching fund requirements; and *iii*) a statewide 25% PM emission reduction target and a 25% PM emission reduction requirement for districts in serious

non-attainment of the federal PM10 standards. Many of the recommendations of the Advisory Board have been implemented through legislation or CMP guidance updates. Although no permanent funding has been established at the levels hoped by the Advisory Committee, the CMP has provided some continued level of funding for the last five years.

In the first three years of the CMP, funded projects reduced NO_x emissions by more than 11 tons per day (tons/day) at an average cost-effectiveness of approximately \$4,000 per ton of NO_x reduced. This cost-effectiveness compares favorably to other air pollution control programs in California. Project lifetimes range from five to 20 years depending on the type of project. Thus, the program offers necessary and cost-effective near- and long-term emission reduction benefits.

THE LOWER-EMISSION SCHOOL BUS PROGRAM

The Lower-Emission School Bus Program is an incentive program that provides grants to school districts to reduce school children's exposure to both toxic PM emissions and smog-forming NO_x emissions through the implementation of two program components: 1) a school bus purchase and infrastructure component to replace the oldest, highest-polluting buses with new, lower-emitting buses meeting the latest federal motor vehicle safety standards; and 2) a retrofit component to reduce PM emissions from the in-use diesel school bus fleet.

For the past two years, the ARB, in conjunction with the CEC, has administered the Lower-Emission School Bus Program. Through the state budget process, Governor Gray Davis and the Legislature allocated a total of \$66 million for the implementation of this program. Of this total funding amount, \$49.5 million has been dedicated to the purchase of safe, lower-emitting new school buses throughout the 2000/2001 and 2001/2002 fiscal years. The remaining \$16.5 million has been dedicated to the purchase and installation of exhaust aftertreatment devices to reduce PM emissions from in-use diesel school buses.

The ARB, the CEC, and the local air quality management and air pollution control districts have administered and implemented the program using the original Lower-Emission School Bus Guidelines approved by the Board on December 7, 2000.

These guidelines are available at ARB's Public Information Office, 1001 I Street, Sacramento, CA, 95812 and at the ARB website: <http://www.arb.ca.gov/schoolbus/schoolbus.htm>. The CEC has been responsible for direct implementation of the program component to replace old school buses with new, low-emitting models in many areas of the state; the five most populous air districts have been responsible for program implementation in their respective regions. For the in-use diesel bus retrofit component of the program, participating air districts are responsible for its direct implementation. This program component is on-going and is not scheduled for completion until September 2003. The ARB is responsible for general program oversight and administration for both components of the Lower-Emission School Bus Program, and will continue in this role for expenditure of the funding provided through Proposition 40, as described below.

PROPOSED REVISIONS TO THE CARL MOYER PROGRAM

Staff is proposing the following eight revisions to the Carl Moyer Program guidelines, each of these revisions are discussed below. Districts may fund only those projects that meet the CMP guidelines and eligibility criteria, or those projects approved on a case-by-case basis by the ARB's Executive Officer.

1) New District Matching Fund Requirements, In-kind Contributions, and Tentative Funding Allocations for FY 2002/2003

Matching fund requirements are important because they provide a literal "buy-in" from local air districts responsible for the selection, monitoring, and enforcement of projects. This requirement also helps ensure that the most worthwhile projects are selected and that more funds are available for clean air projects. For this reason, in the first four years of CMP implementation, a cost share of \$1 of local district funds for every \$2 of CMP funds was required. However, ARB recognizes the new fiscal realities, especially for smaller air districts and the challenges in meeting matching fund requirements. A minimum allocation of \$100,000 for each participating district and a one year waiver of the match requirement for local districts with populations totaling less than one percent of the state population and in attainment of the ozone federal standard are proposed.

As in the past, districts with populations totaling more than one percent of the state population or in non-attainment of the ozone federal standard are eligible for additional funding determined equally by population and commitments for attainment. For these districts, the matching fund requirement remains the same: one dollar of district funds for every two dollars of Carl Moyer funds.

2) New Cost-Effectiveness to Allow for Cost-of-Living Increases

The program cost-effectiveness requirement of \$13,000 per ton of NOx reduced was approved by the ARB in the current set of guidelines in November 2000. Section 44283 of the HSC authorizes the Board to adjust the cost-effectiveness limit to reflect inflation. Thus, ARB has adjusted the cost-effectiveness limits for FY 2002/2003 to reflect a cost of living increase from 2000 to the present. The new cost-effectiveness is \$13,600 per ton of NOx reduced, applicable for FY 2002/2003 and later.

3) Meeting Matching Requirements with PM Emission Reduction Projects

A new provision offers participating districts the ability to use funds under their authority for projects that focus exclusively on PM emission reductions. Funds allocated for PM-only projects can be used to meet matching fund requirements established by the CMP. Possible projects include retrofits for heavy-duty (HD) diesel trucks or off-road diesel equipment with ARB verified after-treatment systems. Participating districts without a match requirement cannot use their minimum allocations to fund PM reduction projects. In addition, the cost-effectiveness criterion of \$13,600/ton of NOx reduced required for all CMP projects does not apply for projects focused on PM emission reductions only. ARB staff will work with districts to develop appropriate cost-effectiveness limits for PM. Districts will retain the flexibility to propose appropriate allocations for PM reduction projects subject to ARB's concurrence.

4) Environmental Justice Requirements

State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies (Government Code section 65040.12). The ARB is committed to making environmental justice an integral part of all its activities. In December 2001, the ARB adopted "Policies and Actions for Environmental Justice" establishing a framework for improving air quality and public health in all California communities, especially in low-income and minority communities. The policy recognizes the need for local air districts to address environmental justice issues at the community level.

AB 1390 (Firebaugh; Stats. 2001, Ch. 763; HSC section 43023.5) established environmental justice requirements for the CMP. Beginning in fiscal year 2001/2002, air districts with greater than one million inhabitants must allocate at least 50% of their CMP incentive money in a manner that directly benefits low-income communities and communities of color that are disproportionately affected by air pollution. This currently includes five air districts: Bay Area Air Quality Management District (AQMD), Sacramento Metropolitan AQMD, San Diego County Air Pollution Control District (APCD), San Joaquin Valley Unified APCD, and South Coast AQMD. Districts with less than a million residents are encouraged to consider environmental justice in allocating CMP funds, to the extent feasible. Some smaller districts have developed environmental justice methodology to implement the CMP. This includes Mendocino County AQMD and Monterey Bay Unified APCD.

Proposition 40 (Public Resources Code section 5096.650), which allocates CMP funds for the fiscal years 2002/2004, reiterates the requirement that environmental justice criterion be considered in determining eligible CMP projects.

5) Update of Engine Emission Standards and Emission Inventories

NO_x and PM emission factors have been revised to reflect the most recent information from ARB's emission inventory models, EMFAC and OFFROAD. Also updated are the emission factors for off-road, agricultural irrigation pump, and marine engines. Specifically, OFFROAD incorporates the most recent regulations for off-road diesel engines adopted by both the U.S. Environmental Protection Agency and ARB.

Under the new guidelines, engines designated for participation in any averaging, banking, and trading (AB&T) program are ineligible to participate in the CMP. This includes off-road engines designated "flexibility" or "family emission level (FEL)" engines. Similarly, on-road engines not meeting current standards, but available through non-conformance penalties (NCP) are not eligible for CMP funding.

6) Consideration of Projects Not Included in the Existing Guidelines

Participating air districts are required to observe strict adherence to the ARB-approved guidelines for the CMP. Technologies that offer real and quantifiable emission reduction benefits are fast developing in a number of project categories. On occasion, these technologies fall outside the core project categories of engine replacement, repower, or retrofit projects. Guidance is included in the revised program guidelines to allow for consideration of these unique and innovative technologies. So long as

emission reduction benefits are real, quantifiable, and enforceable, new provisions allow local districts to identify meritorious projects under an "other" category. Districts are required to consult with ARB for final determination of project eligibility. Projects that fall under the "other" category must be evaluated on a case-by-case basis; funding may not be requested to comply with a regulation or any other legally binding agreement that requires the emission reductions.

7) Engine Repowers

For clarification and in an effort to ensure that emission reductions resulting from engine repowering projects funded under the CMP remain guaranteed for the life of the project by the engine's original equipment manufacturer (OEM), the use of OEM parts and OEM-authorized dealerships and/or distributors for engine repowers shall be required. In this context, repower also includes remanufacturing and rebuilding of engines.

In addition, ARB recognizes that Tier 2 engines may not be feasible for repower installation on some pre-2002 off-road equipment. The Tier 2 engine support system including electrical, cooling, hydraulics, and engine mounts may not be practically installed. Therefore, the revised guidelines include provisions that may allow engines meeting Tier 1 standards for repower installations when it is the only feasible option.

8) Reporting Requirements for Participating Local and Regional Air Districts

An annual report on Proposition 40 expenditures to the Legislature is required. As a result, the Department of Finance, Office of State Audits and Evaluations, will audit program administration at both the state and local levels. The ARB's reports are based on the information provided by all participating districts. Thus, each district must continue to report routinely to ARB following ARB-approved forms and formats. The proposed guidelines offer specific reporting requirements for the participating districts.

PROPOSED REVISIONS TO THE LOWER-EMISSION SCHOOL BUS PROGRAM

The staff is proposing several changes to the existing Lower-Emission School Bus Program. Summarized below are the proposed changes for the continuation of the program with 2002/2003 fiscal year funds provided through Proposition 40.

- 1) Updated regional funding allocations based on \$4,290,000 available statewide in the 2002/2003 fiscal year for the purchase of "clean, safe, school buses."
- 2) CEC administration of the program for school districts in more regions throughout California than in the two previous years of the program, i.e., fewer regions will self-administer the program.
- 3) Board-designated funding split for alternative-fuel school bus purchases and intermediate level diesel school bus purchases (i.e., two-thirds of funding for alternative-fuel school buses; one-third of funding for diesel school buses) to be maintained as statewide goal, with less emphasis on region-specific implementation.
- 4) Minor changes to requirements for school districts to contribute funds toward the purchase of new school buses, including a reduced school district funding

contribution for the purchase of a new school bus that replaces an in-use pre-1977 model year school bus.

- 5) Elimination of the requirement for air districts that self-administer the program to contribute match funding in the amount of ten percent of their respective state funding allocations.
- 6) Updated eligibility criteria for funding new alternative-fuel and intermediate level diesel school buses with 2003 model-year engines.
- 7) Updated program timetable with enforceable delivery deadline for program-funded school buses.
- 8) Monetary penalty assessed on business entity responsible for any delay that results in the failure to deliver program-funded school buses to school districts by the program delivery deadline.
- 9) Program expenditures, at both the local and State level, subject to audit by Office of State Audits and Evaluations, Department of Finance.

STAFF RECOMMENDATIONS

Staff recommends that the Board, at its March 27, 2003 hearing, approve the proposed guideline revisions for the Carl Moyer and Lower-Emission School Bus Programs. The guidelines establish the framework for implementation of the program in California. The impetus for the CMP revisions is to integrate into the program updated information and clarifications of previous provisions. The goal of the program continues to be to achieve real, quantifiable, and enforceable, cost-effective emission reductions. The impetus for the revisions to the Lower-Emission School Bus Program is to update eligibility criteria for funding new school buses due to the introduction of new engine emissions requirements in October 2002, and to incorporate other minor administrative changes.

AVAILABILITY OF DOCUMENTS AND AGENCY CONTACT PERSON

The proposed revisions to the Carl Moyer Program Guidelines and the Lower-Emission School Bus Program Guidelines will be presented by the ARB staff at the Board meeting. Copies of the staff reports, which incorporate the proposed guideline revisions, may be obtained from the Board's Public Information Office, 1001 I Street, Sacramento, CA 95812, (916) 322-2990, prior to the scheduled meeting. Revisions to the Carl Moyer Program Guidelines will also be available electronically on ARB's website at <http://www.arb.ca.gov/msprog/moyer/moyer.htm>. Further inquiries on the CMP should be directed to Chuck Bennett, Air Resources Engineer, at (916) 322-2321.

Revisions to the Lower-Emission School Bus Guidelines are also available on the ARB's website at <http://www.arb.ca.gov/schoolbus/schoolbus.htm>. Inquiries regarding the Lower-Emission School Bus Program should be directed to Krista Fregoso, Air Pollution Specialist, at (916) 445-5035.

The adoption of the revised guidelines is not subject to the Administrative Procedures Act. However, in order to provide at least 45 days for public comment prior to final

adoption, the record on this matter will be held open until April 17, 2003, and comments will be considered by the Executive Officer prior to adopting the revised Guidelines.

SUBMITTAL OF PUBLIC COMMENTS

The public may present comments relating to this matter orally or in writing to the Clerk of the Board in person, on the day of the meeting, and in writing or by e-mail before or after the meeting. To be considered, written submissions not physically submitted at the Board meeting must be received **no later than 12:00 noon, April 17, 2003**, and addressed to the following:

Postal mail is to be sent to: Clerk of the Board
Air Resources Board
1001 "I" Street, 23rd Floor
Sacramento, CA 95814

Electronic mail is to be sent to mover03@listserv.arb.ca.gov and received at the ARB **no later than 12:00 noon, April 17, 2003**.

Facsimile submissions are to be transmitted to the Clerk of the Board at (916) 322-3928 and received at the ARB **no later than 12:00 noon, April 17, 2003**.

The Board requests but does not require 30 copies of any written submission that you would like considered at the public meeting. Also, the ARB requests that written and e-mail statements be filed at least ten days prior to the meeting so that ARB staff and Board Members have time to fully consider each comment.

CALIFORNIA AIR RESOURCES BOARD


Catherine Witherspoon
Executive Officer

Date: February 28, 2003